## Use of Agremax as Municipal Landfill Daily Cover

**Issue:** The use of Agremax as daily cover at municipal landfills in Puerto Rico is an environmentally protective, cost-effective alternative to placing Agremax in a monofill.

## Benefits of use of Agremax as daily cover:

- Will help to decrease the amount of natural soil currently being excavated for daily cover. DECA has observed soil being obtained for daily cover from protected and/or ecologically sensitive areas in PR.
- More cost effective than natural soils. We estimate that there is a high enough demand for daily cover at lined, municipal landfills in PR to account for the amount of Agremax that is produced.
- Will help divert Agremax from current indiscriminate land placement ("sham reuse").
- ORD agrees that using Agremax as daily cover in lined, municipal landfills is an appropriate practice:
  - Spoke with Betsy Devlin, Acting Director; Ross Elliot, Acting Associate Director, Material Recovery and Waste Management Division; Richard Kinch, Branch Chief, Industrial Material Reuse, Resource Conservation and Sustainability Division.
  - Were not concerned with risk to groundwater when used in a lined, RCRA compliant landfill. Groundwater modeling shows that coal ash itself not a risk when disposed in lined landfills.
  - Agremax would meet performance goals with respect to disease vector control, odor control, etc.
  - Dust control may be necessary.

# Agremax monofill disposal vs. municipal landfill daily cover:

• Consultation with NYSDEC (Robert Phaneuf, P.E., Assistant Director, Division of Materials Management):

- NYSDEC requires municipal solid waste landfills to have double composite geotextile liner systems, while ash monofills are required to only have one such liner.
- NYSDEC not aware of risk from silica component of coal ash as daily cover.
- Coal ash is already approved and used as alternate daily cover in several states, including Maryland and Ohio.
- Monofills require additional land use, whereas using Agremax as daily cover will not disturb new land.

## Additional information regarding land placement of Agremax:

- CWA compliance of road expanse near Cimmarona/Palo Seco River Tributary Crossing:
  - After consulting with ORC and the Wetlands Protection Branch, it was determined that Cimmarona/Palo Seco River Tributary is likely a water of the United States. Agremax disposal observed by DECA in a river bed is thus a possible CWA violation.
  - Further evaluation by the Wetlands Protection Branch is dependent upon identification of exact location (GPS coordinates) and subsequent inspection. CEPD will be asked to confirm location through a site visit.
  - Any potential CWA violation would only pertain to the portion of the road where Agremax was placed on a water of the US.

#### **AES Well Field Permit Status:**

• ORC spoke to a permitting official and an attorney with the municipality of Guayama, who said that no municipal permit was required (or thus issued) for the well field road/structural fill. ORC is still investigating whether a permit is required by any other Commonwealth entity such as the highway department.